

COMPLIANCE SAMPLING INSPECTION

ILLINOIS BIRMINGHAM & BOLT
(KANKAKEE COUNTY)Industrial Wastewater
Treatment - IL0035297

INSPECTION DATE:

June 13, 1985

INTERVIEWED:

Gene Satori, Mill Manager
Edward Maynard, Safety
Supervisor

On the above date a Compliance Sampling Inspection was conducted at the subject facility. Form 3550-3 (CSI) is attached for reference.

Facility Description

This facility manufactures bolt and finished steel (rods) from scrap metal. The plant is located on McKnight Road, west of Route 50, just north of the town of Bourbonnais. The two NPDES discharges are as follows:

- 001 - Consists of stormwater runoff from the warehouse and manufacturing area. Treatment consists of an oil-water separator. The effluent is discharged to a ditch that is tributary to Soldier Creek. At the time of inspection the separator itself was full of oily matter and surrounded by bushes at least seven feet high.
- 002 - The waste stream consists of recirculating cooling water for the rolling mill. The cooling water enters a three-stage pond that has the ability to discharge at high levels. The ponds were extremely oily, and obviously at very high temperatures at the time of visit. A sprayer was installed to keep the temperature down. The pond was discharging at the time of visit. Signs of heavy oil were visible on the stained rocks at the outfall. The receiving stream is also a tributary to Soldier Creek.

The plant has been under new management since January of 1984, which is the issuance date of Illinois Birmingham and Bolts new permit. Gene Satori, the present mill manager stated he was unaware of the requirements of his NPDES permit. When he "reviewed" it he "just noted the expiration date then filed it."

O&M Items

During the inspection these deficiencies were noted:

1. Operator's Certification - Presently this facility is without a certified operator (Class K), which is needed for an industrial treatment facility. Recently the mill manager hired Ed Maynard as safety supervisor. Maynard's duties would include all



Environmental permits. He also stated that he recently enlisted the services of Water Environmental Tech, Inc. of Peru, Illinois, as a consultant. According to Maynard, they were one of the companies referred to him by Gary Reside of the IEPA Compliance Assurance Section in Springfield.

During the inspection, Maynard expressed confusion at the fact that two discharges were listed in the NPDES permit. He was under the impression that 002 (the ponds) were 001, and had no notion what 002 was. I informed him that 001 was a separate discharge and showed him the oil separator. He said he had no idea that this facility existed and neither did the consultant.

2. Records and Reports - There are no operating logs or records for any of the discharges or their treatment facilities, no records of when the sprayers were installed, no records of when oil has been removed from the ponds. Additionally, no written records of monitoring or sampling of any kind were available.

NPDES Violations

Monitoring and Reporting - No Discharge Monitoring Reports have been submitted regularly from Illinois Birmingham & Bolt since 1977, when the company went under the name of Jones and McKnight. At the time, Jesse Pritichert was the certified Class K operator. As a result of a pre-enforcement conference on May 2, 1982, attended by Ernest J. Mooney, the plant manager at the time, Illinois Birmingham & Bolt agreed to start monitoring for its NPDES parameters. According to a follow-up letter the company contacted Industrial Analytical Labs in Bourbonnais to perform all testing and fill out reports. One DMR was submitted, unsigned, in November of 1982, under the name of "Principal Executive Officer," - the name typed was Paul W. Wiedenbach, a former employee of Industrial Analytical Labs. The report showed violations in Total Suspended Solids, Oils and Grease and Fecal Coliform, which at the time was a parameter on their expired permit. The TSS for one unspecified discharge showed a concentration of 122 mg/l and FOG of 62.8 mg/l. No further testing is on record at the Industrial Analytical Lab from that period and no further DMRs have been submitted to this Agency.

According to the present mill manager, before Illinois Birmingham & Bolt received a Compliance Inquiry Letter from IEPA dated in February, 1985, addressing non-submittal of DMRs, he was totally unaware of this requirement. Edward Maynard stated that he did take a sample to Industrial Analytical Labs but wasn't sure of the date or what he tested for. Sandy Benjamin of Industrial Analytical Labs, informed this writer that her lab has performed

one test according to the NPDES and has sent Illinois Birmingham & Bolt a price quote for further testing.

Flow Measurement - Illinois Birmingham & Bolts present permit asks for flow to be measured when monitoring. On the aforementioned last DMR submitted to this Agency, the flow for both 001 and 002 was listed as N.A. During the inspection it was noted there was no way under present conditions flow can be accurately measured from each discharge.

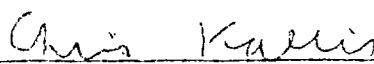
The outfall pipe from the 001 oil separator at the time of visit was at the same water level as the receiving ditch making the determination of flow impossible. Oil separators of this type usually have an overflow weir (most frequently a V-notch type) in order for the flow to be measured at least by the bucket-times method. Although the 002 outfall appeared to be above the water level of the receiving ditch, it was partially covered by rocks (see photo) making any kind of flow measurement impossible.

Effluent - On the present permit, the concentration limits for TSS and FOG, for both 001 and 002, are an average of 15 mg/l and a maximum of 30 mg/l. However, the permit calls for a sampling frequency of a grab sample once a month, making the average and maximum one and the same.

At the time of inspection a grab sample was taken near the overflow pipe at the 001 oil separator. As mentioned earlier, the flow was undeterminable. The lab results showed a TSS of 130 mg/l.

A sample was also taken at the outfall of discharge 002. The lab results showed a FOG concentration of 16 mg/l and a TSS concentration of 160 mg/l. The temperature of the effluent was 95° F, which is just at the temperature limit for June, under Special Condition 5 under the present permit.

Summary - Attached to this inspection are photos taken on May 30, 1985 during a reconnaissance inspection. It is recommended that the O&M deficiencies and NPDES violations be addressed by Region 2.


Chris Kallis, E.P.S.

CK:bh

6/26/85

NPDES COMPLIANCE INSPECTION REPORT (Coding Instructions on back of last page)

TRANSACTION CODE	NPDES	YR	MO	DA	TYPE	INSPECTOR	FAC TYPE	TIME
1	5	11	03	12	17	15	11	
		12		17	10	19	20	a.m. p.m.

REMARKS

21 64

ADDITIONAL

65 70

SECTION A - Permit Summary

NAME AND ADDRESS OF FACILITY (Include County, State and ZIP code)		EXPIRATION DATE
Illinois Birmingham + Bolt McKnight Road Kankakee, Illinois 60901		Dec-1-88
RESPONSIBLE OFFICIAL	TITLE	PHONE
Gene Satori	mill manager	815-937-3127
FACILITY REPRESENTATIVE	TITLE	PHONE
Ed Maynard	safety supervisor	"

SECTION B - Effluent Characteristics (Additional sheets attached) no data available

PARAMETER/OUTFALL	MINIMUM	AVERAGE	MAXIMUM	ADDITIONAL
SAMPLE MEASUREMENT				
PERMIT REQUIREMENT				
SAMPLE MEASUREMENT				
PERMIT REQUIREMENT				
SAMPLE MEASUREMENT				
PERMIT REQUIREMENT				
SAMPLE MEASUREMENT				
PERMIT REQUIREMENT				
SAMPLE MEASUREMENT				
PERMIT REQUIREMENT				

SECTION C - Facility Evaluation (S = Satisfactory, U = Unsatisfactory, N/A = Not applicable)

EFFLUENT WITHIN PERMIT REQUIREMENTS	U	OPERATION AND MAINTENANCE	U	SAMPLING PROCEDURES
RECORDS AND REPORTS	U	COMPLIANCE SCHEDULE	U	LABORATORY PRACTICES
PERMIT VERIFICATION	U	FLOW MEASUREMENTS		OTHER:

SECTION D - Comments

SECTION E - Inspection/Review			ENFORCEMENT DIVISION USE ONLY
SIGNATURES	AGENCY	DATE	COMPLIANCE STATUS
INSPECTED BY Chris Kallis	EPA	7-1-85	<input type="checkbox"/> COMPLIANCE
INSPECTED BY			<input type="checkbox"/> NONCOMPLIANCE
REVIEWED BY [Signature]	EPA	7/1/85	

Sections F thru L: Complete on all inspections, as appropriate. N/A = Not Applicable		PERMIT NO. d10035297
SECTION F - Facility and Permit Background		
ADDRESS OF PERMITTEE IF DIFFERENT FROM FACILITY (Including City, County and ZIP code) d111h013 Birmingham + Bolt PO Box 628 Kankakee, Illinois	DATE OF LAST PREVIOUS INVESTIGATION BY EPA/STATE	
FINDINGS		
SECTION G - Records and Reports		
RECORDS AND REPORTS MAINTAINED AS REQUIRED BY PERMIT. <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> N/A (Further explanation attached _____)		
DETAILS:		
(a) ADEQUATE RECORDS MAINTAINED OF:		
(i) SAMPLING DATE, TIME, EXACT LOCATION	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO <input type="checkbox"/> N/A
(ii) ANALYSES DATES, TIMES	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO <input type="checkbox"/> N/A
(iii) INDIVIDUAL PERFORMING ANALYSIS	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO <input type="checkbox"/> N/A
(iv) ANALYTICAL METHODS/TECHNIQUES USED	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO <input type="checkbox"/> N/A
(v) ANALYTICAL RESULTS (e.g., consistent with self-monitoring report data)	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO <input type="checkbox"/> N/A
(b) MONITORING RECORDS (e.g., flow, pH, D.O., etc.) MAINTAINED FOR A MINIMUM OF THREE YEARS INCLUDING ALL ORIGINAL STRIP CHART RECORDINGS (e.g. continuous monitoring instrumentation, calibration and maintenance records).	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO <input type="checkbox"/> N/A
(c) LAB EQUIPMENT CALIBRATION AND MAINTENANCE RECORDS KEPT.	<input type="checkbox"/> YES	<input type="checkbox"/> NO <input checked="" type="checkbox"/> N/A
(d) FACILITY OPERATING RECORDS KEPT INCLUDING OPERATING LOGS FOR EACH TREATMENT UNIT.	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO <input type="checkbox"/> N/A
(e) QUALITY ASSURANCE RECORDS KEPT.	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO <input type="checkbox"/> N/A
(f) RECORDS MAINTAINED OF MAJOR CONTRIBUTING INDUSTRIES (and their compliance status) USING PUBLICLY OWNED TREATMENT WORKS.	<input type="checkbox"/> YES	<input type="checkbox"/> NO <input checked="" type="checkbox"/> N/A
SECTION H - Permit Verification		
INSPECTION OBSERVATIONS VERIFY THE PERMIT. <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A (Further explanation attached _____)		
DETAILS:		
(a) CORRECT NAME AND MAILING ADDRESS OF PERMITTEE.	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO <input type="checkbox"/> N/A
(b) FACILITY IS AS DESCRIBED IN PERMIT.	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO <input type="checkbox"/> N/A
(c) PRINCIPAL PRODUCT(S) AND PRODUCTION RATES CONFORM WITH THOSE SET FORTH IN PERMIT APPLICATION.	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO <input type="checkbox"/> N/A
(d) TREATMENT PROCESSES ARE AS DESCRIBED IN PERMIT APPLICATION.	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO <input type="checkbox"/> N/A
(e) NOTIFICATION GIVEN TO EPA/STATE OF NEW, DIFFERENT OR INCREASED DISCHARGES.	<input type="checkbox"/> YES	<input type="checkbox"/> NO <input checked="" type="checkbox"/> N/A
(f) ACCURATE RECORDS OF RAW WATER VOLUME MAINTAINED.	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO <input type="checkbox"/> N/A
(g) NUMBER AND LOCATION OF DISCHARGE POINTS ARE AS DESCRIBED IN PERMIT.	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO <input type="checkbox"/> N/A
(h) CORRECT NAME AND LOCATION OF RECEIVING WATERS.	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO <input type="checkbox"/> N/A
(i) ALL DISCHARGES ARE PERMITTED.	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO <input type="checkbox"/> N/A
SECTION I - Operation and Maintenance		
TREATMENT FACILITY PROPERLY OPERATED AND MAINTAINED. <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> N/A (Further explanation attached _____)		
DETAILS:		
(a) STANDBY POWER OR OTHER EQUIVALENT PROVISIONS PROVIDED.	<input type="checkbox"/> YES	<input type="checkbox"/> NO <input checked="" type="checkbox"/> N/A
(b) ADEQUATE ALARM SYSTEM FOR POWER OR EQUIPMENT FAILURES AVAILABLE.	<input type="checkbox"/> YES	<input type="checkbox"/> NO <input checked="" type="checkbox"/> N/A
(c) REPORTS ON ALTERNATE SOURCE OF POWER SENT TO EPA/STATE AS REQUIRED BY PERMIT.	<input type="checkbox"/> YES	<input type="checkbox"/> NO <input checked="" type="checkbox"/> N/A
(d) SLUDGES AND SOLIDS ADEQUATELY DISPOSED.	<input type="checkbox"/> YES	<input type="checkbox"/> NO <input type="checkbox"/> N/A
(e) ALL TREATMENT UNITS IN SERVICE.	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO <input type="checkbox"/> N/A
(f) CONSULTING ENGINEER RETAINED OR AVAILABLE FOR CONSULTATION ON OPERATION AND MAINTENANCE PROBLEMS.	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO <input type="checkbox"/> N/A
(g) QUALIFIED OPERATING STAFF PROVIDED.	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO <input type="checkbox"/> N/A
(h) ESTABLISHED PROCEDURES AVAILABLE FOR TRAINING NEW OPERATORS.	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO <input type="checkbox"/> N/A
(i) FILES MAINTAINED ON SPARE PARTS INVENTORY, MAJOR EQUIPMENT SPECIFICATIONS, AND PARTS AND EQUIPMENT SUPPLIERS.	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO <input type="checkbox"/> N/A
(j) INSTRUCTIONS FILES KEPT FOR OPERATION AND MAINTENANCE OF EACH ITEM OF MAJOR EQUIPMENT.	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO <input type="checkbox"/> N/A
(k) OPERATION AND MAINTENANCE MANUAL MAINTAINED.	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO <input type="checkbox"/> N/A
(l) SFCC PLAN AVAILABLE.	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO <input type="checkbox"/> N/A
(m) REGULATORY AGENCY NOTIFIED OF BY PASSING. (Dates _____)	<input type="checkbox"/> YES	<input type="checkbox"/> NO <input checked="" type="checkbox"/> N/A
(n) ANY BY-PASSING SINCE LAST INSPECTION.	<input type="checkbox"/> YES	<input type="checkbox"/> NO <input checked="" type="checkbox"/> N/A
(o) ANY HYDRAULIC AND/OR ORGANIC OVERLOADS EXPERIENCED.	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO <input type="checkbox"/> N/A

PERMIT NO.

210035297

SECTION J - Compliance Schedules

PERMITTEE IS MEETING COMPLIANCE SCHEDULE.

☐ YES ☐ NO ☐ N/A (Further explanation attached _____)

CHECK APPROPRIATE PHASE(S):

- ☐ (a) THE PERMITTEE HAS OBTAINED THE NECESSARY APPROVALS FROM THE APPROPRIATE AUTHORITIES TO BEGIN CONSTRUCTION.
- ☐ (b) PROPER ARRANGEMENT HAS BEEN MADE FOR FINANCING (mortgage commitments, grants, etc.).
- ☐ (c) CONTRACTS FOR ENGINEERING SERVICES HAVE BEEN EXECUTED.
- ☐ (d) DESIGN PLANS AND SPECIFICATIONS HAVE BEEN COMPLETED.
- ☐ (e) CONSTRUCTION HAS COMMENCED.
- ☐ (f) CONSTRUCTION AND/OR EQUIPMENT ACQUISITION IS ON SCHEDULE.
- ☐ (g) CONSTRUCTION HAS BEEN COMPLETED.
- ☐ (h) START-UP HAS COMMENCED.
- ☐ (i) THE PERMITTEE HAS REQUESTED AN EXTENSION OF TIME.

SECTION K - Self-Monitoring Program

Part 1 - Flow measurement (Further explanation attached _____)

PERMITTEE FLOW MEASUREMENT MEETS THE REQUIREMENTS AND INTENT OF THE PERMIT.

☐ YES ☒ NO ☐ N/A

DETAILS:

(a) PRIMARY MEASURING DEVICE PROPERLY INSTALLED.

☐ YES ☒ NO ☐ N/ATYPE OF DEVICE: ☐ WEIR ☐ PARSHALL FLUME ☐ METER ☐ VENTURIMETER ☐ OTHER (Specify _____)

(b) CALIBRATION FREQUENCY ADEQUATE. (Date of last calibration _____)

☐ YES ☐ NO ☐ N/A

(c) PRIMARY FLOW MEASURING DEVICE PROPERLY OPERATED AND MAINTAINED.

☐ YES ☒ NO ☐ N/A

(d) SECONDARY INSTRUMENTS (totalizers, recorders, etc.) PROPERLY OPERATED AND MAINTAINED.

☐ YES ☒ NO ☐ N/A

(e) FLOW MEASUREMENT EQUIPMENT ADEQUATE TO HANDLE EXPECTED RANGES OF FLOW RATES.

☐ YES ☒ NO ☐ N/A

Part 2 - Sampling (Further explanation attached _____)

PERMITTEE SAMPLING MEETS THE REQUIREMENTS AND INTENT OF THE PERMIT.

☐ YES ☒ NO ☐ N/A

DETAILS:

(a) LOCATIONS ADEQUATE FOR REPRESENTATIVE SAMPLES.

☐ YES ☒ NO ☐ N/A

(b) PARAMETERS AND SAMPLING FREQUENCY AGREE WITH PERMIT.

☐ YES ☒ NO ☐ N/A

(c) PERMITTEE IS USING METHOD OF SAMPLE COLLECTION REQUIRED BY PERMIT.

☐ YES ☒ NO ☐ N/AIF NO, ☐ GRAB ☐ MANUAL COMPOSITE ☐ AUTOMATIC COMPOSITE FREQUENCY _____

(d) SAMPLE COLLECTION PROCEDURES ARE ADEQUATE.

☐ YES ☐ NO ☐ N/A

(i) SAMPLES REFRIGERATED DURING COMPOSITING

☐ YES ☐ NO ☐ N/A

(ii) PROPER PRESERVATION TECHNIQUES USED

☐ YES ☐ NO ☐ N/A

(iii) FLOW PROPORTIONED SAMPLES OBTAINED WHERE REQUIRED BY PERMIT

☐ YES ☐ NO ☐ N/A

(iv) SAMPLE HOLDING TIMES PRIOR TO ANALYSES IN CONFORMANCE WITH 40 CFR 136.3

☐ YES ☐ NO ☐ N/A

(e) MONITORING AND ANALYSES BEING PERFORMED MORE FREQUENTLY THAN REQUIRED BY PERMIT.

☐ YES ☐ NO ☐ N/A

(f) IF (e) IS YES, RESULTS ARE REPORTED IN PERMITTEE'S SELF-MONITORING REPORT.

☐ YES ☐ NO ☐ N/A

Part 3 - Laboratory (Further explanation attached _____)

PERMITTEE LABORATORY PROCEDURES MEET THE REQUIREMENTS AND INTENT OF THE PERMIT.

☐ YES ☒ NO ☐ N/A

DETAILS:

(a) EPA APPROVED ANALYTICAL TESTING PROCEDURES USED. (40 CFR 136.3)

☐ YES ☒ NO ☐ N/A

(b) IF ALTERNATE ANALYTICAL PROCEDURES ARE USED, PROPER APPROVAL HAS BEEN OBTAINED.

☐ YES ☐ NO ☐ N/A

(c) PARAMETERS OTHER THAN THOSE REQUIRED BY THE PERMIT ARE ANALYZED.

☐ YES ☒ NO ☐ N/A

(d) SATISFACTORY CALIBRATION AND MAINTENANCE OF INSTRUMENTS AND EQUIPMENT.

☐ YES ☐ NO ☐ N/A

(e) QUALITY CONTROL PROCEDURES USED.

☐ YES ☒ NO ☐ N/A

(f) DUPLICATE SAMPLES ARE ANALYZED. _____ % OF TIME.

☐ YES ☒ NO ☐ N/A

(g) SPIKED SAMPLES ARE USED. _____ % OF TIME.

☐ YES ☒ NO ☐ N/A

(h) COMMERCIAL LABORATORY USED. A SEC DARTMOUTH

☐ YES ☒ NO ☐ N/A

(i) COMMERCIAL LABORATORY STATE CERTIFIED.

☐ YES ☒ NO ☐ N/A

LAB NAME _____

LAB ADDRESS _____

PERMIT NO.

010035297

SECTION L - Effluent/Receiving Water Observations (Further explanation attached _____)

OUTFALL NO.	OIL SHEEN	GREASE	TURBIDITY	VISIBLE FOAM	VISIBLE FLOAT SOL	COLOR	OTHER
001	Slight	Visible	high	none	yes	grey	
002	Slight	None	high	none	yes	—	

(Sections M and N: Complete as appropriate for sampling inspections)

SECTION M - Sampling Inspection Procedures and Observations (Further explanation attached _____)

- ☒ GRAB SAMPLES OBTAINED
- ☐ COMPOSITE OBTAINED
- ☐ FLOW PROPORTIONED SAMPLE
- ☐ AUTOMATIC SAMPLER USED
- ☐ SAMPLE SPLIT WITH PERMITTEE
- ☐ CHAIN OF CUSTODY EMPLOYED
- ☐ SAMPLE OBTAINED FROM FACILITY SAMPLING DEVICE

COMPOSING FREQUENCY _____

PRESERVATION _____

SAMPLE REFRIGERATED DURING COMPOSITING: ☐ YES ☐ NO

SAMPLE REPRESENTATIVE OF VOLUME AND NATURE OF DISCHARGE _____

SECTION N - Analytical Results (Attach report if necessary)

Lab results have not yet been received as of June-28-85.

ENVIRONMENTAL PROTECTION AGENCY

WASTE TREATMENT WORKS EFFLUENT SAMPLING FORM

005916 JUN 13 85
DIVISION OF WATER POLLUTION CONTROL

SAMPLE COLLECTED BY <u>G. Kallis</u>		LOCATION OF SAMPLING POINT <u>dillon's Birmingham + Belt</u>	
SUB-BASIN (IF NONE ENTER "DIRECT") <u>Kanawha River Boulder CR</u>		TRIBUTARY <u>002</u>	
SEND ORIGINAL OF RESULTS TO: <u>MAA WADA</u>		PERFORMANCE MEASUREMENT SECTION, SPRINGFIELD	
SEND COPY OF RESULTS TO: <u>EDP SERVICE</u>		SECTION, SPRINGFIELD	
CARD COL. 1 <u>FI</u>	CARD NO. 1 <u>01</u>	CARD COL. 2 <u>091</u>	CARD NO. 2 <u>0505916</u>
CARD COL. 3 <u>0505916</u>	CARD NO. 3 <u>0505916</u>	CARD COL. 4 <u>0505916</u>	CARD NO. 4 <u>0505916</u>
SAMPLE TYPE CODE (SEE LIST BELOW) <u>F</u>		SAMPLE TYPE CODE <u>0002</u>	
19-20 <u>85</u> YEAR		19-20 <u>0002</u> PLANT OR STATION NO.	
21-22 <u>06</u> MONTH		21-22 <u>0505916</u> LAB ID NO.	
23-24 <u>12</u> DAY		23-24 <u>0505916</u> LAB ID NO.	
25-26 <u>01</u> HOUR (NEAREST)		25-26 <u>0505916</u> LAB ID NO.	
27 <u>0</u> TIME OF DAY (A.P.M.)		27 <u>0505916</u> LAB ID NO.	
28-30 <u>0</u> WATER TEMPERATURE (DEG. F.)		28-30 <u>0505916</u> LAB ID NO.	
31-33 <u>7.7</u> FIELD D.O.		31-33 <u>0505916</u> LAB ID NO.	
34-36 <u>7.7</u> TOTAL PHOSPHORUS		34-36 <u>0505916</u> LAB ID NO.	
37-40 <u>7.7</u> A.V.C. NO.		37-40 <u>0505916</u> LAB ID NO.	
41-43 <u>7.7</u> PHENOLS		41-43 <u>0505916</u> LAB ID NO.	
44-46 <u>7.7</u> NITRATE + NITRITE AS N		44-46 <u>0505916</u> LAB ID NO.	
47-49 <u>7.7</u> ORGANIC N		47-49 <u>0505916</u> LAB ID NO.	
50-52 <u>7.7</u> TOTAL N		50-52 <u>0505916</u> LAB ID NO.	
53-55 <u>7.7</u> T.D.S. E.C.		53-55 <u>0505916</u> LAB ID NO.	
56-58 <u>7.7</u> TOTAL SUSP. SOLIDS		56-58 <u>0505916</u> LAB ID NO.	
59-61 <u>7.7</u> Fecal Col.		59-61 <u>0505916</u> LAB ID NO.	
62-64 <u>7.7</u> (NO./100ML)		62-64 <u>0505916</u> LAB ID NO.	
65-67 <u>7.7</u> NICKEL		65-67 <u>0505916</u> LAB ID NO.	
68-70 <u>7.7</u> SELENIUM		68-70 <u>0505916</u> LAB ID NO.	
71-73 <u>7.7</u> SILVER		71-73 <u>0505916</u> LAB ID NO.	
74-76 <u>7.7</u> ZINC		74-76 <u>0505916</u> LAB ID NO.	
77-79 <u>7.7</u> LEAD		77-79 <u>0505916</u> LAB ID NO.	
80-82 <u>7.7</u> MANGANESE		80-82 <u>0505916</u> LAB ID NO.	
83-85 <u>7.7</u> IRON (TOTAL)		83-85 <u>0505916</u> LAB ID NO.	
86-88 <u>7.7</u> IRON (DISSOLVED)		86-88 <u>0505916</u> LAB ID NO.	
89-91 <u>7.7</u> MERCURY (MICROGM/L)		89-91 <u>0505916</u> LAB ID NO.	
92-94 <u>7.7</u> COPPER		92-94 <u>0505916</u> LAB ID NO.	
95-97 <u>7.7</u> CYANIDE		95-97 <u>0505916</u> LAB ID NO.	
98-100 <u>7.7</u> CHROMIUM (TRI)		98-100 <u>0505916</u> LAB ID NO.	
101-103 <u>7.7</u> CHROMIUM (HEX)		101-103 <u>0505916</u> LAB ID NO.	
104-106 <u>7.7</u> CHROMIUM (TOTAL)		104-106 <u>0505916</u> LAB ID NO.	
107-109 <u>7.7</u> CHROMIUM (HEX)		107-109 <u>0505916</u> LAB ID NO.	
110-112 <u>7.7</u> CHROMIUM (TOTAL)		110-112 <u>0505916</u> LAB ID NO.	
113-115 <u>7.7</u> CHROMIUM (HEX)		113-115 <u>0505916</u> LAB ID NO.	
116-118 <u>7.7</u> CHROMIUM (TOTAL)		116-118 <u>0505916</u> LAB ID NO.	
119-121 <u>7.7</u> CHROMIUM (HEX)		119-121 <u>0505916</u> LAB ID NO.	
122-124 <u>7.7</u> CHROMIUM (TOTAL)		122-124 <u>0505916</u> LAB ID NO.	
125-127 <u>7.7</u> CHROMIUM (HEX)		125-127 <u>0505916</u> LAB ID NO.	
128-130 <u>7.7</u> CHROMIUM (TOTAL)		128-130 <u>0505916</u> LAB ID NO.	
131-133 <u>7.7</u> CHROMIUM (HEX)		131-133 <u>0505916</u> LAB ID NO.	
134-136 <u>7.7</u> CHROMIUM (TOTAL)		134-136 <u>0505916</u> LAB ID NO.	
137-139 <u>7.7</u> CHROMIUM (HEX)		137-139 <u>0505916</u> LAB ID NO.	
140-142 <u>7.7</u> CHROMIUM (TOTAL)		140-142 <u>0505916</u> LAB ID NO.	
143-145 <u>7.7</u> CHROMIUM (HEX)		143-145 <u>0505916</u> LAB ID NO.	
146-148 <u>7.7</u> CHROMIUM (TOTAL)		146-148 <u>0505916</u> LAB ID NO.	
149-151 <u>7.7</u> CHROMIUM (HEX)		149-151 <u>0505916</u> LAB ID NO.	
152-154 <u>7.7</u> CHROMIUM (TOTAL)		152-154 <u>0505916</u> LAB ID NO.	
155-157 <u>7.7</u> CHROMIUM (HEX)		155-157 <u>0505916</u> LAB ID NO.	
158-160 <u>7.7</u> CHROMIUM (TOTAL)		158-160 <u>0505916</u> LAB ID NO.	
161-163 <u>7.7</u> CHROMIUM (HEX)		161-163 <u>0505916</u> LAB ID NO.	
164-166 <u>7.7</u> CHROMIUM (TOTAL)		164-166 <u>0505916</u> LAB ID NO.	
167-169 <u>7.7</u> CHROMIUM (HEX)		167-169 <u>0505916</u> LAB ID NO.	
170-172 <u>7.7</u> CHROMIUM (TOTAL)		170-172 <u>0505916</u> LAB ID NO.	
173-175 <u>7.7</u> CHROMIUM (HEX)		173-175 <u>0505916</u> LAB ID NO.	
176-178 <u>7.7</u> CHROMIUM (TOTAL)		176-178 <u>0505916</u> LAB ID NO.	
179-181 <u>7.7</u> CHROMIUM (HEX)		179-181 <u>0505916</u> LAB ID NO.	
182-184 <u>7.7</u> CHROMIUM (TOTAL)		182-184 <u>0505916</u> LAB ID NO.	
185-187 <u>7.7</u> CHROMIUM (HEX)		185-187 <u>0505916</u> LAB ID NO.	
188-190 <u>7.7</u> CHROMIUM (TOTAL)		188-190 <u>0505916</u> LAB ID NO.	
191-193 <u>7.7</u> CHROMIUM (HEX)		191-193 <u>0505916</u> LAB ID NO.	
194-196 <u>7.7</u> CHROMIUM (TOTAL)		194-196 <u>0505916</u> LAB ID NO.	
197-199 <u>7.7</u> CHROMIUM (HEX)		197-199 <u>0505916</u> LAB ID NO.	
200-202 <u>7.7</u> CHROMIUM (TOTAL)		200-202 <u>0505916</u> LAB ID NO.	
203-205 <u>7.7</u> CHROMIUM (HEX)		203-205 <u>0505916</u> LAB ID NO.	
206-208 <u>7.7</u> CHROMIUM (TOTAL)		206-208 <u>0505916</u> LAB ID NO.	
209-211 <u>7.7</u> CHROMIUM (HEX)		209-211 <u>0505916</u> LAB ID NO.	
212-214 <u>7.7</u> CHROMIUM (TOTAL)		212-214 <u>0505916</u> LAB ID NO.	
215-217 <u>7.7</u> CHROMIUM (HEX)		215-217 <u>0505916</u> LAB ID NO.	
218-220 <u>7.7</u> CHROMIUM (TOTAL)		218-220 <u>0505916</u> LAB ID NO.	
221-223 <u>7.7</u> CHROMIUM (HEX)		221-223 <u>0505916</u> LAB ID NO.	
224-226 <u>7.7</u> CHROMIUM (TOTAL)		224-226 <u>0505916</u> LAB ID NO.	
227-229 <u>7.7</u> CHROMIUM (HEX)		227-229 <u>0505916</u> LAB ID NO.	
230-232 <u>7.7</u> CHROMIUM (TOTAL)		230-232 <u>0505916</u> LAB ID NO.	
233-235 <u>7.7</u> CHROMIUM (HEX)		233-235 <u>0505916</u> LAB ID NO.	
236-238 <u>7.7</u> CHROMIUM (TOTAL)		236-238 <u>0505916</u> LAB ID NO.	
239-241 <u>7.7</u> CHROMIUM (HEX)		239-241 <u>0505916</u> LAB ID NO.	
242-244 <u>7.7</u> CHROMIUM (TOTAL)		242-244 <u>0505916</u> LAB ID NO.	
245-247 <u>7.7</u> CHROMIUM (HEX)		245-247 <u>0505916</u> LAB ID NO.	
248-250 <u>7.7</u> CHROMIUM (TOTAL)		248-250 <u>0505916</u> LAB ID NO.	
251-253 <u>7.7</u> CHROMIUM (HEX)		251-253 <u>0505916</u> LAB ID NO.	
254-256 <u>7.7</u> CHROMIUM (TOTAL)		254-256 <u>0505916</u> LAB ID NO.	
257-259 <u>7.7</u> CHROMIUM (HEX)		257-259 <u>0505916</u> LAB ID NO.	
260-262 <u>7.7</u> CHROMIUM (TOTAL)		260-262 <u>0505916</u> LAB ID NO.	
263-265 <u>7.7</u> CHROMIUM (HEX)		263-265 <u>0505916</u> LAB ID NO.	
266-268 <u>7.7</u> CHROMIUM (TOTAL)		266-268 <u>0505916</u> LAB ID NO.	
269-271 <u>7.7</u> CHROMIUM (HEX)		269-271 <u>0505916</u> LAB ID NO.	
272-274 <u>7.7</u> CHROMIUM (TOTAL)		272-274 <u>0505916</u> LAB ID NO.	
275-277 <u>7.7</u> CHROMIUM (HEX)		275-277 <u>0505916</u> LAB ID NO.	
278-280 <u>7.7</u> CHROMIUM (TOTAL)		278-280 <u>0505916</u> LAB ID NO.	
281-283 <u>7.7</u> CHROMIUM (HEX)		281-283 <u>0505916</u> LAB ID NO.	
284-286 <u>7.7</u> CHROMIUM (TOTAL)		284-286 <u>0505916</u> LAB ID NO.	
287-289 <u>7.7</u> CHROMIUM (HEX)		287-289 <u>0505916</u> LAB ID NO.	
290-292 <u>7.7</u> CHROMIUM (TOTAL)		290-292 <u>0505916</u> LAB ID NO.	
293-295 <u>7.7</u> CHROMIUM (HEX)		293-295 <u>0505916</u> LAB ID NO.	
296-298 <u>7.7</u> CHROMIUM (TOTAL)		296-298 <u>0505916</u> LAB ID NO.	
299-301 <u>7.7</u> CHROMIUM (HEX)		299-301 <u>0505916</u> LAB ID NO.	
302-304 <u>7.7</u> CHROMIUM (TOTAL)		302-304 <u>0505916</u> LAB ID NO.	
305-307 <u>7.7</u> CHROMIUM (HEX)		305-307 <u>0505916</u> LAB ID NO.	
308-310 <u>7.7</u> CHROMIUM (TOTAL)		308-310 <u>0505916</u> LAB ID NO.	
311-313 <u>7.7</u> CHROMIUM (HEX)		311-313 <u>0505916</u> LAB ID NO.	
314-316 <u>7.7</u> CHROMIUM (TOTAL)		314-316 <u>0505916</u> LAB ID NO.	
317-319 <u>7.7</u> CHROMIUM (HEX)		317-319 <u>0505916</u> LAB ID NO.	
320-322 <u>7.7</u> CHROMIUM (TOTAL)		320-322 <u>0505916</u> LAB ID NO.	
323-325 <u>7.7</u> CHROMIUM (HEX)		323-325 <u>0505916</u> LAB ID NO.	
326-328 <u>7.7</u> CHROMIUM (TOTAL)		326-328 <u>0505916</u> LAB ID NO.	
329-331 <u>7.7</u> CHROMIUM (HEX)		329-331 <u>0505916</u> LAB ID NO.	
332-334 <u>7.7</u> CHROMIUM (TOTAL)		332-334 <u>0505916</u> LAB ID NO.	
335-337 <u>7.7</u> CHROMIUM (HEX)		335-337 <u>0505916</u> LAB ID NO.	
338-340 <u>7.7</u> CHROMIUM (TOTAL)		338-340 <u>0505916</u> LAB ID NO.	
341-343 <u>7.7</u> CHROMIUM (HEX)		341-343 <u>0505916</u> LAB ID NO.	
344-346 <u>7.7</u> CHROMIUM (TOTAL)		344-346 <u>0505916</u> LAB ID NO.	
347-349 <u>7.7</u> CHROMIUM (HEX)		347-349 <u>0505916</u> LAB ID NO.	
350-352 <u>7.7</u> CHROMIUM (TOTAL)		350-352 <u>0505916</u> LAB ID NO.	
353-355 <u>7.7</u> CHROMIUM (HEX)		353-355 <u>0505916</u> LAB ID NO.	
356-358 <u>7.7</u> CHROMIUM (TOTAL)		356-358 <u>0505916</u> LAB ID NO.	
359-361 <u>7.7</u> CHROMIUM (HEX)		359-361 <u>0505916</u> LAB ID NO.	
362-364 <u>7.7</u> CHROMIUM (TOTAL)		362-364 <u>0505916</u> LAB ID NO.	
365-367 <u>7.7</u> CHROMIUM (HEX)		365-367 <u>0505916</u> LAB ID NO.	
368-370 <u>7.7</u> CHROMIUM (TOTAL)		368-370 <u>0505916</u> LAB ID NO.	
371-373 <u>7.7</u> CHROMIUM (HEX)		371-373 <u>0505916</u> LAB ID NO.	
374-376 <u>7.7</u> CHROMIUM (TOTAL)		374-376 <u>0505916</u> LAB ID NO.	
377-379 <u>7.7</u> CHROMIUM (HEX)		377-379 <u>0505916</u> LAB ID NO.	
380-382 <u>7.7</u> CHROMIUM (TOTAL)		380-382 <u>0505916</u> LAB ID NO.	
383-385 <u>7.7</u> CHROMIUM (HEX)		383-385 <u>0505916</u> LAB ID NO.	
386-388 <u>7.7</u> CHROMIUM (TOTAL)		386-388 <u>0505916</u> LAB ID NO.	
389-391 <u>7.7</u> CHROMIUM (HEX)		389-391 <u>0505916</u> LAB ID NO.	
392-394 <u>7.7</u> CHROMIUM (TOTAL)		392-394 <u>0505916</u> LAB ID NO.	
395-397 <u>7.7</u> CHROMIUM (HEX)		395-397 <u>0505916</u> LAB ID NO.	
398-400 <u>7.7</u> CHROMIUM (TOTAL)		398-400 <u>0505916</u> LAB ID NO.	
401-403 <u>7.7</u> CHROMIUM (HEX)		401-403 <u>0505916</u> LAB ID NO.	
404-406 <u>7.7</u> CHROMIUM (TOTAL)		404-406 <u>0505916</u> LAB ID NO.	
407-409 <u>7.7</u> CHROMIUM (HEX)		407-409 <u>0505916</u> LAB ID NO.	
410-412 <u>7.7</u> CHROMIUM (TOTAL)		410-412 <u>0505916</u> LAB ID NO.	
413-415 <u>7.7</u> CHROMIUM (HEX)		413-415 <u>0505916</u> LAB ID NO.	
416-418 <u>7.7</u> CHROMIUM (TOTAL)		416-418 <u>0505916</u> LAB ID NO.	
419-421 <u>7.7</u> CHROMIUM (HEX)		419-421 <u>0505916</u> LAB ID NO.	
422-424 <u>7.7</u> CHROMIUM (TOTAL)		422-424 <u>0505916</u> LAB ID NO.	
425-427 <u>7.7</u> CHROMIUM (HEX)		425-427 <u>0505916</u> LAB ID NO.	
428-430 <u>7.7</u> CHROMIUM (TOTAL)		428-430 <u>0505916</u> LAB ID NO.	
431-433 <u>7.7</u> CHROMIUM (HEX)		431-433 <u>0505916</u> LAB ID NO.	
434-436 <u>7.7</u> CHROMIUM (TOTAL)		434-436 <u>0505916</u> LAB ID NO.	
437-439 <u>7.7</u> CHROMIUM (HEX)		437-439 <u>0505916</u> LAB ID NO.	
440-442 <u>7.7</u> CHROMIUM (TOTAL)		440-442 <u>0505916</u> LAB ID NO.	
443-445 <u>7.7</u> CHROMIUM (HEX)		443-445 <u>0505916</u> LAB ID NO.	
446-448 <u>7.7</u> CHROMIUM (TOTAL)		446-448 <u>0505916</u> LAB ID NO.	
449-451 <u>7.7</u> CHROMIUM (HEX)		449-451 <u>0505916</u> LAB ID NO.	
452-454 <u>7.7</u> CHROMIUM (TOTAL)		452-454 <u>0505916</u> LAB ID NO.	
455-457 <u>7.7</u> CHROMIUM (HEX)		455-457 <u>0505916</u> LAB ID NO.	
458-460 <u>7.7</u> CHROMIUM (TOTAL)		458-460 <u>0505916</u> LAB ID NO.	
461-463 <u>7.7</u> CHROMIUM (HEX)		461-463 <u>0505916</u> LAB ID NO.	
464-466 <u>7.7</u> CHROMIUM (TOTAL)		464-466 <u>0505916</u> LAB ID NO.	
467-469 <u>7.7</u> CHROMIUM (HEX)		467-469 <u>0505916</u> LAB ID NO.	
470-472 <u>7.7</u> CHROMIUM (TOTAL)		470-472 <u>0505916</u> LAB ID NO.	
473-475 <u>7.7</u> CHROMIUM (HEX)		473-475 <u>0505916</u> LAB ID NO.	
476-478 <u>7.7</u> CHROMIUM (TOTAL)		476-478 <u>0505916</u> LAB ID NO.	
479-481 <u>7.7</u> CHROMIUM (HEX)		479-481 <u>0505916</u> LAB ID NO.	
482-484 <u>7.7</u> CHROMIUM (TOTAL)		482-484 <u>0505916</u> LAB ID NO.	
485-487 <u>7.7</u> CHROMIUM (HEX)		485-487 <u>0505916</u> LAB ID NO.	
488-490 <u>7.7</u> CHROMIUM (TOTAL)		488-490 <u>0505916</u> LAB ID NO.	
491-493 <u>7.7</u> CHROMIUM (HEX)		491-493 <u>0505916</u> LAB ID NO.	
494-496 <u>7.7</u> CHROMIUM (TOTAL)		494-496 <u>0505916</u> LAB ID NO.	
497-499 <u>7.7</u> CHROMIUM (HEX)		497-499 <u>0505916</u> LAB ID NO.	
500-502 <u>7.7</u> CHROMIUM (TOTAL)		500-502 <u>0505916</u> LAB ID NO.	
503-505 <u>7.7</u> CHROMIUM (HEX)		503-505 <u>0505916</u> LAB ID NO.	
506-508 <u>7.7</u> CHROMIUM (TOTAL)		506-508 <u>0505916</u> LAB ID NO.	
509-511 <u>7.7</u> CHROMIUM (HEX)		509-511 <u>0505916</u> LAB ID NO.	
512-514 <u>7.7</u> CHROMIUM (TOTAL)		512-514 <u>0505916</u> LAB ID NO.	
515-517 <u>7.7</u> CHROMIUM (HEX)		515-517 <u>0505916</u> LAB ID NO.	
518-520 <u>7.7</u> CHROMIUM (TOTAL)		518-520 <u>0505916</u> LAB ID NO.	
521-523 <u>7.7</u> CHROMIUM (HEX)		521-523 <u>0505916</u> LAB ID NO.	
524-526 <u>7.7</u> CHROMIUM (TOTAL)		524-526 <u>0505916</u> LAB ID NO.	
527-529 <u>7.7</u> CHROMIUM (HEX)		527-529 <u>0505916</u> LAB ID NO.	
530-532 <u>7.7</u> CHROMIUM (TOTAL)		530-532 <u>0505916</u> LAB ID NO.	
533-535 <u>7.7</u> CHROMIUM (HEX)		533-535 <u>0505916</u> LAB ID NO.	
536-538 <u>7.7</u> CHROMIUM (TOTAL)		536-538 <u>0505916</u> LAB ID NO.	
539-541 <u>7.7</u> CHROMIUM (HEX)		539-541 <u>0505916</u> LAB ID NO.	
542-544 <u>7.7</u> CHROMIUM (TOTAL)		542-544 <u>0505916</u> LAB ID NO.	
545-547 <u>7.7</u> CHROMIUM (HEX)		545-547 <u>0505916</u> LAB ID NO.	
548-550 <u>7.7</u> CHROMIUM (TOTAL)		548-550 <u>0505916</u> LAB ID NO.	
551-553 <u>7.7</u> CHROMIUM (HEX)		551-553 <u>0505916</u> LAB ID NO.	
554-556 <u>7.7</u> CHROMIUM (TOTAL)		554-556 <u>0505916</u> LAB ID NO.	
557-559 <u>7.7</u> CHROMIUM (HEX)		557-559 <u>0505916</u> LAB ID NO.	
560-562 <u>7.7</u> CHROMIUM (TOTAL)		560-562 <u>0505916</u> LAB ID NO.	
563-565 <u>7.7</u>			